

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. **(Currently Amended)** Filtering cartridge comprising:
 - a filtering pack formed by filtering medium;
 - a tubular sheath with a perforated wall, surrounding said filtering medium, wherein there is a chamber between said filtering pack and tubular sheath;and
 - two respective thermoplastic end caps, in each of which there is embedded a portion of said filtering pack situated along one of its edges, and in each of which there is embedded a portion of said sheath situated along one of its edges;characterised in that:
 - at least one said end cap has a first disc and a second disc, placed one above the other, each made from thermoplastic;
 - said second disc has said portion of the filtering pack and said sheath portion embedded;
 - said first disc has a peripheral rim which surrounds said portion of the sheath; and
 - said sheath has a shoulder opposite the edge of the said rim of the first disc.
2. **(Previously Presented)** The cartridge according to Claim 1, wherein said portion of the sheath forms part of a neck thinner than the rest of the wall of the sheath.
3. **(Previously Presented)** The cartridge according to Claim 1, wherein said portion of the sheath forms part of a neck thinner than the rest of the wall of the sheath and said neck has a thickness which increases from the edge of the sheath.

4. **(Previously Presented)** The cartridge according to Claim 1, wherein said portion of the sheath forms part of a neck thinner than the rest of the wall of the sheath and said neck is situated between the edge and said shoulder of the sheath.

5. **(Previously Presented)** The cartridge according to Claim 1, wherein the edge of the sheath extends from an internal surface, situated in continuity with the general internal surface of the sheath, to a frustoconical surface which extends from the edge to said shoulder, which extends from said frustoconical surface to the general external surface of the sheath.

6. **(Previously Presented)** The cartridge according to Claim 1, wherein said rim of the first disc extends projecting from a plate.

7. **(Previously Presented)** The cartridge according to Claim 1, wherein the thickness of said rim increases from its edge.

8. **(Currently Amended)** The cartridge according to Claim ~~6~~¹, wherein the edge of said rim extends from an external lateral surface, having substantially the same diameter as the general external surface of the sheath, to a frustoconical surface extending from this rim to said plate.

9. **(Previously Presented)** The cartridge according to Claim 1, wherein said shoulder on the sheath and the edge of said rim has substantially the same width.

10. **(Previously Presented)** The cartridge according to Claim 1, wherein said rim faces said portion of the sheath embedded in the second disc through a surface which is frustoconical.

11. **(Previously Presented)** The cartridge according to Claim 1, wherein said portion of the sheath embedded in the second disc faces said rim through a surface which is frustoconical.

12. **(Previously Presented)** The cartridge according to Claim 1, wherein said portion of the sheath embedded in the second disc and said rim face each other through a respective frustoconical surface, said respective frustoconical surfaces being similar.

13. **(Previously Presented)** The cartridge according to Claim 1, wherein said rim has interruptions.

14. **(Previously Presented)** The cartridge according to Claim 1, wherein said rim has interruptions and said interruptions are disposed at regular intervals and each extend over an arc with the same angle at the apex.

15. **(Previously Presented)** The cartridge according to Claim 1, wherein said rim has interruptions and said rim has four said interruptions each extending over an arc whose angle at the apex is approximately 30°.

16. **(Previously Presented)** The cartridge according to Claim 1, wherein said first disc has, opposite to said second disc, an annular rib.

17. **(Previously Presented)** The cartridge according to Claim 1, wherein at least one said end cap having a first disc and a second disc placed one above the other, has a central orifice.

18. **(Previously Presented)** The cartridge according to Claim 1, wherein the first disc of the cap has a central orifice and has a rim around said central orifice.

19. **(Currently Amended)** The cartridge according to Claim 1, wherein the first disc of the cap having a central orifice, has a rim around said central orifice, it also comprises a tubular core with a perforated wall, surrounded by said filtering medium and having, along at least one edge, a portion of said core embedded in said second disc.

20. **(Currently Amended)** The cartridge according to Claim 19~~1~~, wherein each said portion of the core forms part of a neck which is thinner than the rest of the core.

21. **(Currently Amended)** The cartridge according to Claim 19~~1~~, wherein the edge of the core extends from an internal surface, situated in continuity with the general internal surface of the core to a frustoconical surface which extends from the edge to the general external surface of the core.

22. **(Previously Presented)** The cartridge according to Claim 1, wherein melt flow rate at 230°C and under 2.16 kg, according to the ASTM D1238 or ISO 1133 test method, is lower for the material of the first disc than for the material of the second disc.

23. **(Currently Amended)** The cartridge according to Claim 22~~1~~, wherein said melt flow rate is no more than 15 g per 10 minutes for the material of the first disc.

24. **(Currently Amended)** The cartridge according to Claim 22~~1~~, wherein said melt flow rate of the first disc is between 4.2 and 6.5 g per 10 minutes.

25. **(Currently Amended)** The cartridge according to Claim 22~~1~~, wherein said melt flow rate of the second disc is between 25 and 100 g per 10 minutes.

26. **(Currently Amended)** The cartridge according to Claim 22~~1~~, wherein said melt flow rate of the second disc is between 65 and 75 g per 10 minutes.

27. **(Previously Presented)** The cartridge according to Claim 1, wherein said end cap comprising a first disc and a second disc is moulded by bi-injection.

28. **(Previously Presented)** The cartridge according to Claim 1, wherein said second disc is moulded onto said first disc.

29. **(Previously Presented)** The cartridge according to Claim 1, wherein said first disc and said second disc are made from polypropylene.

30. **(Previously Presented)** The cartridge according to Claim 1, wherein said first disc is made from a homopolymer polypropylene while the second disc is made from a copolymer polypropylene.

31. **(Previously Presented)** The cartridge according to Claim 1, wherein said filtering medium forms a filtering pack containing a filtering membrane and two support layers sandwiching said membrane.

32. **(Previously Presented)** The cartridge according to Claim 1, wherein said filtering medium also comprises a thermoplastic ribbon disposed in the vicinity of each edge of said medium.

33. **(Previously Presented)** The cartridge according to Claim 1, wherein said filtering medium is at least a membrane which is made from polyvinylidene fluoride (PVDF).

34. **(Previously Presented)** The cartridge according to Claim 1, wherein said filtering medium contains one or more support layers, said one or more support layers are made from thermoplastic.

35. **(Currently Amended)** The cartridge according to Claim 341, wherein said layers and a thermoplastic ribbon disposed in the vicinity of each edge of said medium are made from polypropylene.

36. **(Currently Amended)** The cartridge according to Claim 1, wherein each said end cap has a said first disc and a said second disc, and cooperates in a similar fashion with the sheath and the filtering medium.